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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/735,361	DLUGOSZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Boris Benenson	2836	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/08/2006.
2. ☒ The allowed claim(s) is/are 6,8-10 and 12-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|  | 9. <input type="checkbox"/> Other _____.   |

***Detailed Actions***

1. Amendment received on 08/08/2006 is entered.  
Claims 6,8,10, and 12 are amended.  
Claims 7 and 11 are cancelled.  
Claims 6, 8-10 and 12-18 are pending in the Application.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney of the Application Gerald E. McGlynn, III on 9/15/2006.

The application has been amended as follows:

3. Enter Attachment I.

***Allowable Subject Matter***

4. Claims 6, 8-10, and 12-18 are allowed.

**The following is an examiner's statement of reasons for allowance:**

5. Independent Claims 6, 10 and 15 are allowable because none of the prior art of record disclose an anti-pinch and electrical motor protection circuit comprising a first and a second positive temperature coefficient protectors having a first and a second predetermined temperature thresholds and a diode in parallel with the first positive temperature coefficient protector in combination with the other claim limitations.

6. Claims 8-9, 12-14, and 16-18 are dependent on allowable claims and therefore allowable.

***Comments to reasons for allowance***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (571) 272-2048. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boris Benenson  
Examiner  
Art Unit 2836

B.B.



**BRIAN SIRCUS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNICAL CENTER 2800**

Attachment 1 (15 pages)

**IN THE CLAIMS:**

Please amend the claims as follows:

1 - 5. (Cancelled)

6. (Currently Amended) An anti-pinch and electric motor protection device comprising:  
a positive temperature coefficient circuit protector ~~having a predetermined temperature threshold, said positive temperature coefficient circuit protector adapted to be in electrical series with a DC circuit to allow current flow in a first direction and in a second opposite direction when said positive temperature coefficient circuit protector is below said threshold and to block current flow in either direction when said positive temperature coefficient circuit protector is above said threshold~~ including a first positive temperature coefficient circuit protector with a first predetermined temperature threshold and a second positive temperature coefficient circuit protector having a second predetermined temperature threshold that is higher than said first predetermined temperature threshold of said first positive temperature coefficient circuit protector, said second positive temperature coefficient circuit protector disposed in electrical series with said first positive temperature coefficient circuit protector, said series connected first and said second positive temperature coefficient circuit protectors adapted to allow current flow in a first direction and in a second opposite direction when both said positive temperature coefficient circuit protectors are below said thresholds and to block current flow in <sup>either</sup> ~~either~~ direction when either said positive temperature coefficient circuit protector is above its threshold; and

a diode in parallel with said positive temperature coefficient circuit protector adapted to block current flow in one of said directions.

7. (Cancelled)

8. (Currently Amended) An anti-pinch and electric motor protection circuit as set forth in claim 1 wherein said first predetermined temperature threshold is chosen to represent a first temperature that is indicative of a first excessive current in said motor caused by a motor stall, and wherein said second predetermined temperature threshold is chosen to represent a second temperature that is indicative of a greater excessive current in said motor caused by a motor stall that is higher than said first predetermined temperature threshold.

9. (Previously Presented) An anti-pinch and electric motor protection device as set forth in claim 8 wherein said first predetermined temperature threshold is approximately 125 degrees C and said second predetermined temperature threshold is approximately 150 degrees C.

10. (Currently Amended) An anti-pinch and electric motor protection circuit comprising:  
a DC motor adapted to accept current flow in a first direction and a second direction so as to operatively rotate said motor in a first angular direction and a second angular direction in response to the application of said first and said second directions of current flow;

a positive temperature coefficient circuit protector ~~having a predetermined temperature threshold, said positive temperature coefficient circuit protector adapted to be in electrical communication with said DC motor to allow current flow in a first direction and in a second opposite direction when said positive temperature coefficient circuit protector is below said threshold and to block current flow in either direction when said positive temperature coefficient circuit protector is~~

above said threshold including a first positive temperature coefficient circuit protector with a first predetermined temperature threshold and a second positive temperature coefficient circuit protector having a second predetermined temperature threshold that is higher than said first predetermined temperature threshold of said first positive temperature coefficient circuit protector, said second positive temperature coefficient circuit protector disposed in electrical series with said first positive temperature coefficient circuit protector and adapted to allow current flow in a first direction and in a second opposite direction when said second positive temperature coefficient circuit protector is below said second threshold and to block current flow in <sup>either</sup> ~~ether~~ direction when said second positive temperature coefficient circuit protector is above said second threshold; and B5

a diode in parallel with said positive temperature coefficient circuit protector adapted to block current flow to said motor in one of said directions.

11. (Cancelled)

12. (Currently Amended) An anti-pinch and electric motor protection circuit as set forth in claim [[11]] 10 wherein said first predetermined temperature threshold is chosen to represent a first temperature that is indicative of a first excessive current in said motor, and wherein said second predetermined temperature threshold is chosen to represent a second temperature that is indicative of a greater excessive current in said motor that is higher than said first predetermined temperature threshold.

13. (Previously Presented) An anti-pinch and electric motor protection circuit as set forth in claim 12 wherein said diode orientation in said circuit is adapted to cause all said current in said

first current direction to flow through said first positive temperature coefficient circuit protector to drive said motor in said first angular direction with no current flow through said diode, said diode orientation is further adapted to allow current to flow in said second direction after said first predetermined temperature threshold is exceeded so that said motor can be driven in said second angular direction.

14. (Previously Presented) An anti-pinch and electric motor protection circuit as set forth in claim 12 wherein said first predetermined temperature threshold is approximately 125 degrees C and said second predetermined temperature threshold is approximately 150 degrees C.

15. (Previously Presented) An anti-pinch and electric motor protection circuit comprising:

a DC motor adapted to accept current flow in a first direction and a second direction so as to operatively rotate in a first angular direction and a second angular direction in response to the application of said first and said second directions of current flow;

a first positive temperature coefficient circuit protector having a first predetermined temperature threshold;

a second positive temperature coefficient circuit protector having a second predetermined temperature threshold that is higher than said first predetermined temperature threshold of said first positive temperature coefficient circuit protector, said second positive temperature coefficient circuit protector disposed in electrical series with said first positive temperature coefficient circuit protector;

said series connected first and said second positive temperature coefficient circuit protectors adapted to be in electrical communication with said DC motor to allow current flow in a first



direction and in a second opposite direction when both said positive temperature coefficient circuit protectors are below said thresholds; and

a diode in parallel with said first positive temperature coefficient circuit protector.

16. (Previously Presented) An anti-pinch and electric motor protection circuit as set forth in claim 15 wherein said first predetermined temperature threshold is chosen to represent a first temperature that is indicative of a first excessive current in said motor, and wherein said second predetermined temperature threshold is chosen to represent a second temperature that is indicative of a greater excessive current in said motor that is higher than said first predetermined temperature threshold.

17. (Previously Presented) An anti-pinch and electric motor protection circuit as set forth in claim 16 wherein said diode orientation in said circuit is adapted to cause all said current in said first current direction to flow through said first positive temperature coefficient circuit protector to drive said motor in said first angular direction with no current flow through said diode, said diode orientation is further adapted to allow current to flow in said second direction after said first predetermined temperature threshold is exceeded so that said motor can be driven in said second angular direction.

18. (Previously Presented) An anti-pinch and electric motor protection circuit as set forth in claim 16 wherein said first predetermined temperature threshold is approximately 125 degrees C and said second predetermined temperature threshold is approximately 150 degrees C.